Chico State Ag Mechanics Contest Tool List

This is minimum list of tools to bring. You should have a separate toolbox for each portion of the contest. Team members will be in separate rotations and cannot share tools. Tool boxes MUST be returned to the tool area between rotations. Toolboxes left behind may be removed for safety reasons. Please mark tools and equipment with school name as they can easily be mixed during the contest.

Personal gear that each contestant should have at all times:
- Safety glasses (required at all times in the shop and under welding helmets)
- #2 pencil (with working eraser)
- 6’ steel tape
- Clipboard
- Protective clothing is recommended

Arc Welding
- Welding Helmet (shade 10)
- Chipping Hammer
- Wire Brush
- Gloves
- Coveralls/Leathers (no frayed clothing, long sleeves required)
- Pliers/Tongs
- Soapstone
- Square
- 1/8” E6011 rod
- 1/8” E7018 rod
- Clamp and fixture (for out of position welding) is recommended

Oxy-Acetylene
- #5 Shade Goggles or Face Shield
- Pliers/Tongs
- Chipping Hammer
- Wire Brush
- Gloves
- Coveralls/Leathers (no frayed clothing, long sleeves required)
- Tip cleaner
- Soapstone
- Square
- Brazing rod and flux for iron or steel
- 1/6” steel welding rod

Written Test
- Calculator

Tool ID
- The tool between your ears

Problem Solving/Plan Interpretation
- Calculator
- Multi-meter
- Scale

Cold Metal
- Layout tools appropriate for cold metal and sheet metal. A combination square and scribe are recommended.
- Dividers
- C Clamp
- File (flat mill and bastard recommended)
- Drill (must be battery powered)
- Drill Bits Size: 1/16”-1/4” (fractional index)
- Hacksaw
- Ball peen hammer
- Center punch
- Pliers
- Pop Rivet Gun
- Snips (straight or duckbill recommend)
- 3/8” x 20 tap & handle

Surveying
- Calculator
- 12” Ruler